DEPARTMENT OF PUBLIC INSTRUCTION

Chapter PI 11

APPENDIX A

Regression Formula for Calculating Significant Discrepancy Scores

Information needed	for Calculation:		
IQ/Ability Score	=	SD of IQ/Cognitive Test =	(SDi)
Achievement Score	=	SD of Achievement Test =	(SDa)
		Correlation between tests = <u>0</u> .	(r)*
Formula:			
Expected Achievement	nt = (SDa/SDi)r(IQ-100)))+100 =	
Discrepancy = Expected Achievement – Obtained Achievement Score			=
SD Discrepancy = SD	oa √1 -r²		=
Cut-off:			
Discrepancy / SD Dis	crepancy =		
If number is greater th	nan 1.75, there is a signi	ficant discrepancy between achievement	and ability scores

When the test publisher provides tables for significant differences between ability and achievement scores (such as with the Weschler Intelligence Scale for Children– 3 and the Weschler Individual Achievement Test), these tables may be used in lieu of this formula. Cut–offs should be derived using a 1.75 Standard Error of Estimate (SEe) criterion so that the difference between expected and obtained scores in the bottom 4% of the distribution meet the standard for a significant discrepancy (i.e. 1.75 SEe units below the expected score).

^{*} If correlation between tests is unknown, use .62